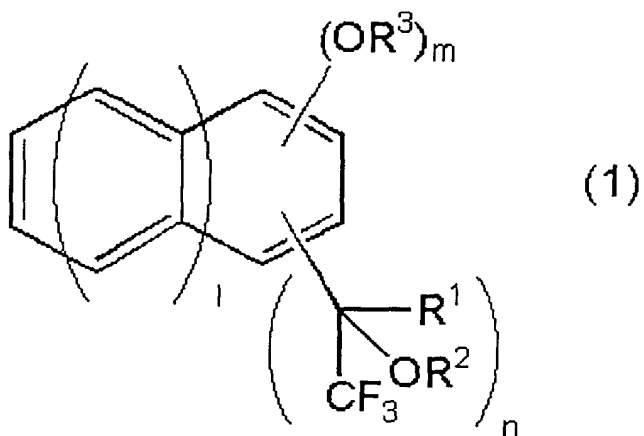


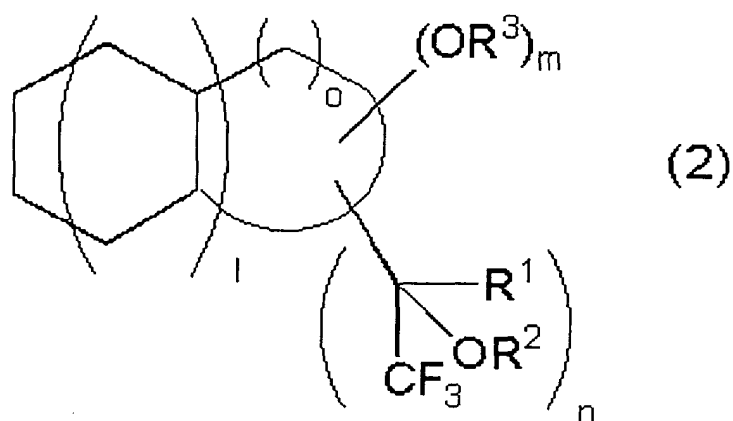
WHAT IS CLAIMED IS:

- 1 1. A fluorine-containing compound represented by the formula 1,



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3 where R¹ is a methyl group or trifluoromethyl group,
4 each of R² and R³ is independently a hydrogen atom or a group
5 containing (a) a hydrocarbon group having a straight-chain, branched or
6 ring form and having a carbon atom number of 1-25 or (b) an aromatic
7 hydrocarbon group, the group optionally containing at least one of a
8 fluorine atom, an oxygen atom and a carbonyl bond,
9 l is an integer of from 0 to 2, each of m and n is independently an
10 integer of 1-5 to satisfy an expression of m+n ≤ 6, and
11 when at least one of R¹, R² and R³ is in a plural number, the at
12 least one of R¹, R² and R³ may be identical with or different from each
13 other.

- 1 2. A fluorine-containing compound represented by the formula 2,



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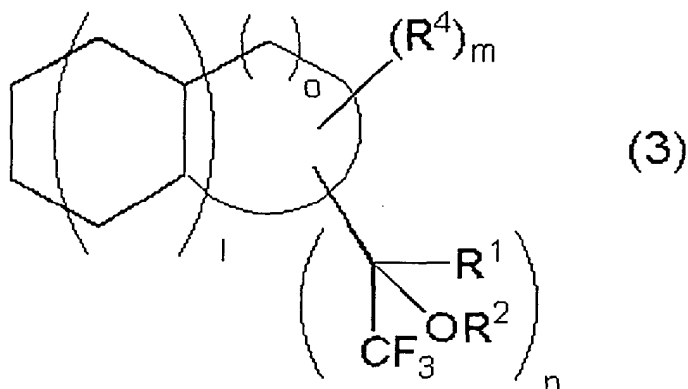
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where R^1 is a methyl group or trifluoromethyl group,
each of R^2 and R^3 is independently a hydrogen atom or a group
containing (a) a hydrocarbon group having a straight-chain, branched or
ring form and having a carbon atom number of 1-25 or (b) an aromatic
hydrocarbon group, the group optionally containing at least one of a
fluorine atom, an oxygen atom and a carbonyl bond,
 l is an integer of from 0 to 2, each of m and n is independently an
integer of 1-9 and o is an integer of 1-8 to satisfy an expression of $m+n \leq$
 $o+2$, and
when at least one of R^1 , R^2 and R^3 is in a plural number, the at
least one of R^1 , R^2 and R^3 may be identical with or different from each
other.

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3. A fluorine-containing compound represented by the formula 3,



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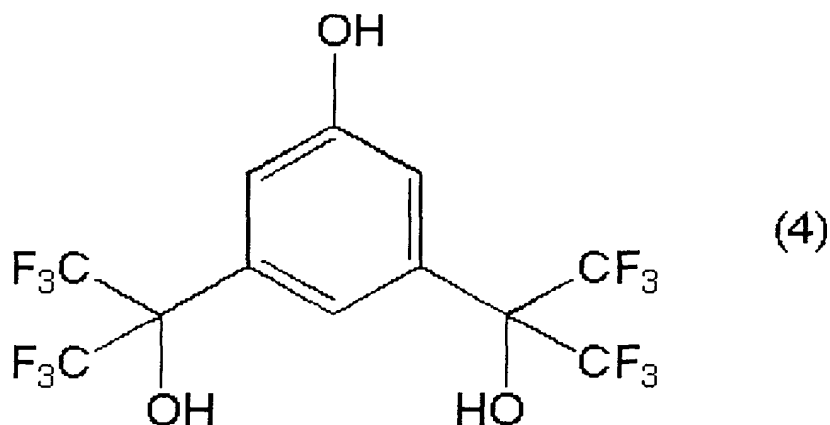
where R^1 is a methyl group or trifluoromethyl group,

each of R^2 and R^4 is independently a hydrogen atom or a group containing (a) a hydrocarbon group having a straight-chain, branched or ring form and having a carbon atom number of 1-25 or (b) an aromatic hydrocarbon group, the group optionally containing at least one of a fluorine atom, an oxygen atom and a carbonyl bond,

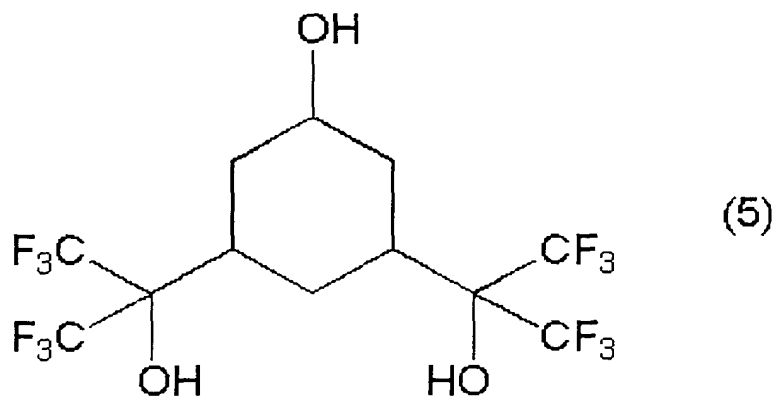
l is an integer of from 0 to 2, each of m and n is independently an integer of 1-9 and o is an integer of 1-8 to satisfy an expression of $m+n \leq o+2$, and

when at least one of R^1 , R^2 and R^4 is in a plural number, the at least one of R^1 , R^2 and R^4 may be identical with or different from each other.

4. A fluorine-containing compound represented by the formula 4.



5. A fluorine-containing compound represented by the formula 5.



1 6. A compound according to claim 1, wherein at least one of R^2 and R^3
2 comprises (a) a functional group selected from the group consisting of vinyl
3 group, allyl group, acryloyl group, and methacryloyl group, or (b) a
4 substituent having at least one fluorine atom substituted for a part or all
5 of hydrogen atoms of the functional group.

1 7. A compound according to claim 2, wherein at least one of R^2 and R^3
2 comprises (a) a functional group selected from the group consisting of vinyl
3 group, allyl group, acryloyl group, and methacryloyl group, or (b) a
4 substituent having at least one fluorine atom substituted for a part or all
5 of hydrogen atoms of the functional group.

1 8. A compound according to claim 1, wherein at least one of R^2 and R^3
2 comprises a substituent selected from the group consisting of trifluorovinyl
3 group, difluorotrifluoromethylvinyl group, fluoroacryloyl group,
4 trifluoromethylacryloyl group, and nonylfluorobutylacryloyl group.

1 9. A compound according to claim 2, wherein at least one of R^2 and R^3
2 comprises a substituent selected from the group consisting of trifluorovinyl
3 group, difluorotrifluoromethylvinyl group, fluoroacryloyl group,
4 trifluoromethylacryloyl group, and nonylfluorobutylacryloyl group.

1 10. A compound according to claim 3, wherein R^4 is (a) a functional
2 group selected from the group consisting of vinyl group, allyl group, epoxy
3 group, and ethynyl group, or (b) a substituent having at least one fluorine
4 atom substituted for a part or all of hydrogen atoms of the functional
5 group.

1 11. A compound according to claim 1, wherein at least one of R^2 and R^3
2 comprises an acid-labile protecting group that optionally contains at least
3 one of an oxygen atom, a carbonyl bond and a fluorine atom.

1 12. A compound according to claim 2, wherein at least one of R² and R³
2 comprises an acid-labile protecting group that optionally contains at least
3 one of an oxygen atom, a carbonyl bond and a fluorine atom.

1 13. A compound according to claim 3, wherein at least one of R² and R³
2 comprises an acid-labile protecting group that optionally contains at least
3 one of an oxygen atom, a carbonyl bond and a fluorine atom.

1 14. A polymer prepared by a polymerization or copolymerization using
2 a fluorine-containing compound according to claim 1.

1 15. An anti-reflection coating material for an ultraviolet or visible light,
2 comprising a polymer according to claim 14.

1 16. A resist composition comprising a polymer according to claim 14.